FILE 'HOME' ENTERED AT 14:32:43 ON 22 JUL 2002

=> INDEX CHEMISTRY PHARMACOLOGY BIOSCIENCE MEETINGS TOXICOLOGY

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

INDEX 'AGRICOLA, ALUMINIUM, ANABSTR, BABS, BIOCOMMERCE, BIOTECHNO, CABA, CAOLD, CAPLUS, CBNB, CEABA-VTB, CEN, CERAB, CIN, COMPENDEX, CONFSCI, COPPERLIT, CORROSION, DKILIT, ENCOMPLIT, ENCOMPLIT2, FEDRIP, GENBANK, INSPEC, INSPHYS, INVESTEXT, IPA, JICST-EPLUS, ...' ENTERED AT 14:33:46 ON 22 JUL 2002

0.42

0.42

105 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0\* with SET DETAIL OFF.

#### => s hepcidin

- 1 FILE AGRICOLA
- 9 FILE BIOTECHNO
- 2 FILE CABA
- 12 FILE CAPLUS
- 1 FILE CONFSCI
- 13 FILE GENBANK
- 30 FILES SEARCHED...
  - 1 FILE PASCAL
  - 12 FILE SCISEARCH
- 44 FILES SEARCHED...
  - 9 FILE BIOSIS
- 52 FILES SEARCHED...
- 55 FILES SEARCHED...
  - 1 FILE EMBAL
  - 11 FILE EMBASE
  - 7 FILE ESBIOBASE
  - 4 FILE LIFESCI
  - 12 FILE MEDLINE
  - 6 FILE TOXCENTER
- 79 FILES SEARCHED...
- 103 FILES SEARCHED...

15 FILES HAVE ONE OR MORE ANSWERS, 105 FILES SEARCHED IN STNINDEX

### L1 QUE HEPCIDIN

=> fit hits

FIT IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s l1 and (pharmaceutical (w) composition)

26 FILES SEARCHED...

<---->

u

=> file hits

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

3.18

FULL ESTIMATED COST

3.60

FILE 'GENBANK' ENTERED AT 14:37:23 ON 22 JUL 2002

FILE 'CAPLUS' ENTERED AT 14:37:23 ON 22 JUL 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

```
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FILE 'ESBIOBASE' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'AGRICOLA' ENTERED AT 14:37:23 ON 22 JUL 2002
FILE 'CONFSCI' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'PASCAL' ENTERED AT 14:37:23 ON 22 JUL 2002
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FILE 'EMBAL' ENTERED AT 14:37:23 ON 22 JUL 2002
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=> s l1 and (pharmaceutical (w) composition)
L2
             0 FILE GENBANK
L3
             0 FILE CAPLUS
L4
             0 FILE SCISEARCH
L5
             0 FILE MEDLINE
L6
             0 FILE EMBASE
             0 FILE BIOTECHNO
L7
             0 FILE BIOSIS
L8
             0 FILE ESBIOBASE
L<sub>9</sub>
L10
            0 FILE TOXCENTER
            0 FILE LIFESCI
L11
            0 FILE CABA
L12
L13
             0 FILE AGRICOLA
L14
            0 FILE CONFSCI
L15
             0 FILE PASCAL
             0 FILE EMBAL
TOTAL FOR ALL FILES
             0 L1 AND (PHARMACEUTICAL (W) COMPOSITION)
=> s l1
L18
           13 FILE GENBANK
L19
           12 FILE CAPLUS
L20
           12 FILE SCISEARCH
```

```
L21
           12 FILE MEDLINE
L22
           11 FILE EMBASE
L23
           9 FILE BIOTECHNO
L24
            9 FILE BIOSIS
L25
            7 FILE ESBIOBASE
            6 FILE TOXCENTER
L26
L27
            4 FILE LIFESCI
L28
            2 FILE CABA
L29
            1 FILE AGRICOLA
L30
            1 FILE CONFSCI
L31
            1 FILE PASCAL
L32
            1 FILE EMBAL
TOTAL FOR ALL FILES
L33
     101 L1
=> s 133 and pharmaceutical
L34
         0 FILE GENBANK
L35
             0 FILE CAPLUS
L36
            0 FILE SCISEARCH
L37
            0 FILE MEDLINE
L38
            0 FILE EMBASE
L39
            0 FILE BIOTECHNO
L40
            0 FILE BIOSIS
L41
            0 FILE ESBIOBASE
L42
            0 FILE TOXCENTER
L43
            0 FILE LIFESCI
            0 FILE CABA
L44
L45
            0 FILE AGRICOLA
L46
            0 FILE CONFSCI
L47
            0 FILE PASCAL
L48
            0 FILE EMBAL
TOTAL FOR ALL FILES
L49
            0 L33 AND PHARMACEUTICAL
=> s 133 and carrier
L50
             0 FILE GENBANK
L51
             0 FILE CAPLUS
L52
            0 FILE SCISEARCH
L53
            0 FILE MEDLINE
L54
            0 FILE EMBASE
L55
            0 FILE BIOTECHNO
L56
           0 FILE BIOSIS
L57
           0 FILE ESBIOBASE
L58
           0 FILE TOXCENTER
L59
           0 FILE LIFESCI
           0 FILE CABA
L60
            0 FILE AGRICOLA
L61
            0 FILE CONFSCI
L62
L63
            0 FILE PASCAL
            0 FILE EMBAL
TOTAL FOR ALL FILES
            0 L33 AND CARRIER
=> s 133 and toxic and therapeutic
L66
            O FILE GENBANK
L67
            0 FILE CAPLUS
L68
            0 FILE SCISEARCH
L69
           O FILE MEDLINE
L70
           0 FILE EMBASE
L71
           0 FILE BIOTECHNO
L72
           0 FILE BIOSIS
L73
           0 FILE ESBIOBASE
```

0 FILE TOXCENTER

L74

```
L75
            O FILE LIFESCI
            O FILE CABA
L76
            0 FILE AGRICOLA
L77
            0 FILE CONFSCI
L78
            O FILE PASCAL
L79
L80
            O FILE EMBAL
TOTAL FOR ALL FILES
     0 L33 AND TOXIC AND THERAPEUTIC
L81
=> s 133 and toxic
         O FILE GENBANK
L82
L83
            O FILE CAPLUS
L84
           0 FILE SCISEARCH
L85
           O FILE MEDLINE
           O FILE EMBASE
L86
           0 FILE BIOTECHNO
L87
           0 FILE BIOSIS
L88
L89
           O FILE ESBIOBASE
           O FILE TOXCENTER
L90
L91
           0 FILE LIFESCI
           0 FILE CABA
L92
           0 FILE AGRICOLA
L93
L94
           O FILE CONFSCI
L95
           0 FILE PASCAL
L96
            O FILE EMBAL
TOTAL FOR ALL FILES
            0 L33 AND TOXIC
=> s 133 and pollutant
           O FILE GENBANK
L99
            0 FILE CAPLUS
L100
           0 FILE SCISEARCH
           O FILE MEDLINE
L101
L102
           O FILE EMBASE
           0 FILE BIOTECHNO
L103
           0 FILE BIOSIS
L104
           0 FILE ESBIOBASE
L105
           0 FILE TOXCENTER
L106
           O FILE LIFESCI
L107
           0 FILE CABA
L108
           0 FILE AGRICOLA
L109
L110
           0 FILE CONFSCI
L111
           O FILE PASCAL
L112
            O FILE EMBAL
TOTAL FOR ALL FILES
L113
      0 L33 AND POLLUTANT
=> s hepcidin and pollutant
         O FILE GENBANK
L114
L115
            O FILE CAPLUS
            0 FILE SCISEARCH
L116
L117
            O FILE MEDLINE
            O FILE EMBASE
L118
           0 FILE BIOTECHNO
0 FILE BIOSIS
0 FILE ESBIOBASE
L119
L120
L121
           O FILE TOXCENTER
L122
           0 FILE LIFESCI
L123
           0 FILE CABA
L124
           0 FILE AGRICOLA
L125
           0 FILE CONFSCI
L126
```

O FILE PASCAL

O FILE EMBAL

L127

L128

```
TOTAL FOR ALL FILES
L129 0 HEPCIDIN AND POLLUTANT
=> s hepcidin and (toxicological or toxicology)
      0 FILE GENBANK
L130
L131
           0 FILE CAPLUS
          0 FILE SCISEARCH
L132
L133
          O FILE MEDLINE
L134
          O FILE EMBASE
          0 FILE BIOTECHNO
L135
          0 FILE BIOSIS
L136
          0 FILE ESBIOBASE
L137
           0 FILE TOXCENTER
L138
         0 FILE LIFESCI
L139
       0 FILE CABA
L140
          0 FILE AGRICOLA
L141
          0 FILE CONFSCI
L142
          0 FILE PASCAL
L143
L144
           0 FILE EMBAL
TOTAL FOR ALL FILES
L145 0 HEPCIDIN AND (TOXICOLOGICAL OR TOXICOLOGY)
=> s hepcidin and therapeutical
L146 0 FILE GENBANK
L147
           0 FILE CAPLUS
L148
          0 FILE SCISEARCH
           0 FILE MEDLINE
L149
           0 FILE EMBASE
L150
           0 FILE BIOTECHNO
L151
L152
           0 FILE BIOSIS
L153
       0 FILE ESBIOBASE
         0 FILE TOXCENTER
L154
          0 FILE LIFESCI
L155
           0 FILE CABA
L156
           0 FILE AGRICOLA
L157
L158
           0 FILE CONFSCI
           0 FILE PASCAL
L159
           O FILE EMBAL
L160
TOTAL FOR ALL FILES
L161 0 HEPCIDIN AND THERAPEUTICAL
=> s hepcidin and environment
L162 0 FILE GENBANK
L163
           0 FILE CAPLUS
L164
          0 FILE SCISEARCH
L165
           O FILE MEDLINE
           0 FILE EMBASE
L166
          0 FILE BIOTECHNO
L167
          0 FILE BIOSIS
L168
L169
          0 FILE ESBIOBASE
L170
          0 FILE TOXCENTER
           0 FILE LIFESCI
L171
           0 FILE CABA
L172
           0 FILE AGRICOLA
L173
L174
           0 FILE CONFSCI
           0 FILE PASCAL
L175
L176
           0 FILE EMBAL
TOTAL FOR ALL FILES
L177
           0 HEPCIDIN AND ENVIRONMENT
=> dup rem 133
```

DUPLICATE IS NOT AVAILABLE IN 'GENBANK'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE PROCESSING COMPLETED FOR L33

L178 33 DUP REM L33 (68 DUPLICATES REMOVED)

=> d l178 1-33 ibib abs

NO VALID FORMATS ENTERED FOR FILE 'GENBANK'

In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT): d 1178 1-3 ibib abs 'D' IS NOT A VALID FORMAT

'L178' IS NOT A VALID FORMAT

'1-3' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):

<---->User Break---->

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT) : end

=> d 11781 1-3 ibib abs

'L1781' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):1178

'L178' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l178 1-5 ibib abs

L178 ANSWER 1 OF 33 MEDLINE

DUPLICATE 1

ACCESSION NUMBER: 2002106063 MEDLINE

DOCUMENT NUMBER: 21826274 PubMed ID: 11836175

TITLE: Absence of hepcidin gene mutations in 10 Italian

patients with primary iron overload.

COMMENT: Comment in: Haematologica. 2002 Feb;87(2):115-6

AUTHOR: Majore Silvia; Binni Francesco; Ricerca Bianca Maria;

Brioli Gloria; Grammatico Paola

SOURCE: HAEMATOLOGICA, (2002 Feb) 87 (2) 221-2.

Journal code: 0417435. ISSN: 0390-6078.

PUB. COUNTRY: Italy

Letter

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200204

ENTRY DATE: Entered STN: 20020212

Last Updated on STN: 20020416 Entered Medline: 20020415

We analyzed the hepcidin gene in 10 Italian patients with AB hemochromatosis not related to C282Y, H63D or other less frequent HFE mutations, nor to Y250X in TFR2. The sequencing of the whole hepcidin coding region, intron-exon junctions, 5' and partially 3'UTRs, did not reveal any alteration in the studied patients.

L178 ANSWER 2 OF 33 MEDLINE

ACCESSION NUMBER: 2002106048 MEDLINE

DOCUMENT NUMBER: 21826258 PubMed ID: 11836159 TITLE: Novel genes, proteins, and inherited disorders of iron

overload: iron metabolism is less boring than thought.

COMMENT: Comment on: 1

Comment on: Haematologica. 2002 Feb;87(2):221-2

AUTHOR: Cazzola Mario

SOURCE: HAEMATOLOGICA, (2002 Feb) 87 (2) 115-6.

Journal code: 0417435. ISSN: 0390-6078.

PUB. COUNTRY: Italy

Commentary Editorial

LANGUAGE: English

FILE SEGMENT:

Priority Journals

OTHER SOURCE:

OMIM-235200; OMIM-602390; OMIM-604250; OMIM-606069

ENTRY MONTH:

200204

ENTRY DATE:

Entered STN: 20020212

Last Updated on STN: 20020416 Entered Medline: 20020415

L178 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2

ACCESSION NUMBER:

2002:290294 CAPLUS

DOCUMENT NUMBER:

137:45188

TITLE:

Severe iron deficiency anemia in transgenic mice

expressing liver hepcidin

AUTHOR (S):

Nicolas, Gael; Bennoun, Myriam; Porteu, Arlette; Mativet, Sandrine; Beaumont, Carole; Grandchamp,

Bernard; Sirito, Mario; Sawadogo, Michele; Kahn, Axel;

Vaulont, Sophie

CORPORATE SOURCE:

Departement de genetique, developpement et Pathologie Moleculaire, Institut Cochin, Institut National de la Sante et de la Recherche Medicale, Centre National de la Recherche Scientifique, et Universite Pene

la Recherche Scientifique, et Universite Rene Descartes, Faculte de Medecine Cochin-Port Royal,

Paris, 75014, Fr.

SOURCE:

Proceedings of the National Academy of Sciences of the

United States of America (2002), 99(7), 4596-4601

CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

We recently reported the hemochromatosis-like phenotype obsd. in our Usf2 AB knockout mice. In these mice, as in murine models of hemochromatosis and patients with hereditary hemochromatosis, iron accumulates in parenchymal cells (in particular, liver and pancreas), whereas the reticuloendothelial system is spared from this iron loading. We suggested that this phenotypic trait could be attributed to the absence, in the Usf2 knockout mice, of a secreted liver-specific peptide, hepcidin. We conjectured that the reverse situation, namely overexpression of hepcidin, might result in phenotypic traits of iron deficiency. This question was addressed by generating transgenic mice expressing hepcidin under the control of the liver-specific transthyretin promoter. We found that the majority of the transgenic mice were born with a pale skin and died within a few hours after birth. These transgenic animals had decreased body iron levels and presented severe microcytic hypochromic anemia. So far, three mosaic transgenic animals have survived. They were unequivocally identified by phys. features, including reduced body size, pallor, hairless and crumpled skin. These pleiotropic effects were found to be assocd. with erythrocyte abnormalities, with marked anisocytosis, poikylocytosis and hypochromia, which are features characteristic of iron-deficiency anemia. These results strongly support the proposed role of hepcidin as a putative iron-regulatory hormone. The animal models devoid of hepcidin (the Usf2 knockout mice) or overexpressing the peptide (the transgenic mice presented in this paper) represent valuable tools for investigating iron homeostasis in vivo and for deciphering the mol. mechanisms of hepcidin action.

REFERENCE COUNT:

21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3

ACCESSION NUMBER: 2002:351679 CAPLUS

TITLE: Bass hepcidin is a novel antimicrobial

peptide induced by bacterial challenge

AUTHOR (S): Shike, Hiroko; Lauth, Xavier; Westerman, Mark E.;

> Ostland, Vaughn E.; Carlberg, James M.; Van Olst, Jon C.; Shimizu, Chisato; Bulet, Philippe; Burns, Jane C.

CORPORATE SOURCE: Department of Pediatrics, San Diego School of

Medicine, University of California, La Jolla, CA,

92093-0830, USA

SOURCE: European Journal of Biochemistry (2002), 269(8),

2232-2237

CODEN: EJBCAI; ISSN: 0014-2956

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

We report the isolation of a novel antimicrobial peptide, bass hepcidin, from the gill of hybrid striped bass, white bass (Morone chrysops) .times. striped bass (M. saxatilis). After the i.p. injection of Micrococcus luteus and Escherichia coli, the peptide was purified from HPLC fractions with antimicrobial activity against Escherichia coli.

Sequencing by Edman degrdn. revealed a 21-residue peptide

(GCRFCCNCCPNMSGCGVCCRF) with eight putative cysteines. Mol. mass

measurements of the native peptide and the reduced and alkylated peptide confirmed the sequence with four intramol. disulfide bridges. Peptide

sequence homol. to human hepcidin and other predicted

hepcidins, indicated that the peptide is a new member of the hepcidin family. Nucleotide sequences for cDNA and genomic DNA were detd. for white bass. A predicted prepropeptide (85 amino acids) consists of three domains: a signal peptide (24 amino acids), prodomain (40 amino acids) and a mature peptide (21 amino acids). The gene has two introns and three exons. A TATA box and several consensus-binding motifs for transcription factors including C/EBP, nuclear factor-.kappa.B, and hepatocyte nuclear factor were found in the region upstream of the transcriptional start site. In white bass liver, hepcidin gene expression was induced 4500-fold following challenge with the fish pathogen, Streptococcus iniae, while expression levels remained low in all other tissues tested. A novel antimicrobial peptide from the gill, bass

hepcidin, is predominantly expressed in the liver and highly inducible by bacterial exposure.

REFERENCE COUNT: THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS 21 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 5 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002172161 EMBASE

TITLE: Molecular diversity in gene-encoded, cationic antimicrobial

polypeptides.

**AUTHOR:** Tossi A.; Sandri L.

CORPORATE SOURCE: A. Tossi, Dept. Biochem. Biophys./Mol. Chem., University of

Trieste, Via Giorgieri 1, 34127 Trieste, Italy.

tossi@bbcm.univ.trieste.it

SOURCE: Current Pharmaceutical Design, (2002) 8/9 (743-761).

Refs: 137

ISSN: 1381-6128 CODEN: CPDEFP

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; General Review FILE SEGMENT: 004 Microbiology

> 030 Pharmacology

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

Gene-encoded, ribosomally synthesised antimicrobial peptides (AMPs) are an ancient and pervasive component of the innate defence mechanisms used by multicellular organisms to control the natural flora and combat pathogens. Bacteria also produce such AMPs to maintain ecological niches free of

rival strains. Several hundred different peptides have been characterised to date, and they show a marked degree of variability in both sequence and structure, having evolved to act against distinct microbial targets in different physiological contexts. Many of these peptides appear to function via a selective, but not receptor-mediated, permeabilisation of microbial membranes, while others interact with specific membrane associated or intracellular targets. This review presents a broad survey of different AMP structural classes, emphasising both their molecular diversity and underlying similarities. The mode of action of these peptides and potential for biomedical and other application is also briefly discussed.

=> d 178 6-33 ibib abs

L78 HAS NO ANSWERS

L30

1 SEA FILE=CONFSCI ABB=ON PLU=ON HEPCIDIN

L78 0 SEA FILE=CONFSCI ABB=ON PLU=ON L30 AND TOXIC AND THERAPEUTIC

=> d 1178 6-33 ibib abs

NO VALID FORMATS ENTERED FOR FILE 'GENBANK'

In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l178 3-15 ibib abs

L178 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2

ACCESSION NUMBER: 2002:290294 CAPLUS

DOCUMENT NUMBER: 137:45188

TITLE: Severe iron deficiency anemia in transgenic mice

expressing liver hepcidin

AUTHOR(S): Nicolas, Gael; Bennoun, Myriam; Porteu, Arlette;

Mativet, Sandrine; Beaumont, Carole; Grandchamp,

Bernard; Sirito, Mario; Sawadogo, Michele; Kahn, Axel;

Vaulont, Sophie

CORPORATE SOURCE: Departement de genetique, developpement et Pathologie

Moleculaire, Institut Cochin, Institut National de la Sante et de la Recherche Medicale, Centre National de

la Recherche Scientifique, et Universite Rene Descartes, Faculte de Medecine Cochin-Port Royal,

Paris, 75014, Fr.

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2002), 99(7), 4596-4601

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

We recently reported the hemochromatosis-like phenotype obsd. in our Usf2 knockout mice. In these mice, as in murine models of hemochromatosis and patients with hereditary hemochromatosis, iron accumulates in parenchymal cells (in particular, liver and pancreas), whereas the reticuloendothelial system is spared from this iron loading. We suggested that this phenotypic trait could be attributed to the absence, in the Usf2 knockout mice, of a secreted liver-specific peptide, hepcidin. We conjectured that the reverse situation, namely overexpression of hepcidin, might result in phenotypic traits of iron deficiency. This question was addressed by generating transgenic mice expressing hepcidin under the control of the liver-specific transthyretin promoter. We found that the majority of the transgenic mice were born with a pale skin and died within a few hours after birth. These transgenic animals had decreased body iron levels and presented severe microcytic hypochromic anemia. So far, three mosaic transgenic animals

have survived. They were unequivocally identified by phys. features, including reduced body size, pallor, hairless and crumpled skin. These pleiotropic effects were found to be assocd. with erythrocyte abnormalities, with marked anisocytosis, poikylocytosis and hypochromia, which are features characteristic of iron-deficiency anemia. These results strongly support the proposed role of hepcidin as a putative iron-regulatory hormone. The animal models devoid of hepcidin (the Usf2 knockout mice) or overexpressing the peptide (the transgenic mice presented in this paper) represent valuable tools for investigating iron homeostasis in vivo and for deciphering the mol. mechanisms of hepcidin action.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3

ACCESSION NUMBER: 2002:351679 CAPLUS

TITLE:

Bass hepcidin is a novel antimicrobial peptide induced by bacterial challenge

AUTHOR(S): Shike, Hiroko; Lauth, Xavier; Westerman, Mark E.;

Ostland, Vaughn E.; Carlberg, James M.; Van Olst, Jon C.; Shimizu, Chisato; Bulet, Philippe; Burns, Jane C.

CORPORATE SOURCE: Department of Pediatrics, San Diego School of

Medicine, University of California, La Jolla, CA,

92093-0830, USA

SOURCE: European Journal of Biochemistry (2002), 269(8),

2232-2237

CODEN: EJBCAI; ISSN: 0014-2956

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB We report the isolation of a novel antimicrobial peptide, bass hepcidin, from the gill of hybrid striped bass, white bass (Morone chrysops) .times. striped bass (M. saxatilis). After the i.p. injection of Micrococcus luteus and Escherichia coli, the peptide was purified from HPLC fractions with antimicrobial activity against Escherichia coli. Sequencing by Edman degrdn. revealed a 21-residue peptide (GCRFCCNCCPNMSGCGVCCRF) with eight putative cysteines. Mol. mass measurements of the native peptide and the reduced and alkylated peptide confirmed the sequence with four intramol. disulfide bridges. Peptide sequence homol. to human hepcidin and other predicted hepcidins, indicated that the peptide is a new member of the hepcidin family. Nucleotide sequences for cDNA and genomic DNA were detd. for white bass. A predicted prepropeptide (85 amino acids) consists of three domains: a signal peptide (24 amino acids), prodomain (40 amino acids) and a mature peptide (21 amino acids). The gene has two introns and three exons. A TATA box and several consensus-binding motifs for transcription factors including C/EBP, nuclear factor-.kappa.B, and hepatocyte nuclear factor were found in the region upstream of the transcriptional start site. In white bass liver, hepcidin gene expression was induced 4500-fold following challenge with the fish pathogen, Streptococcus iniae, while expression levels remained low in all other tissues tested. A novel antimicrobial peptide from the gill, bass hepcidin, is predominantly expressed in the liver and highly inducible by bacterial exposure.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 5 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002172161 EMBASE

TITLE: Molecular diversity in gene-encoded, cationic antimicrobial

polypeptides.

AUTHOR: Tossi A.; Sandri L.

CORPORATE SOURCE: A. Tossi, Dept. Biochem. Biophys./Mol. Chem., University of

Trieste, Via Giorgieri 1, 34127 Trieste, Italy.

tossi@bbcm.univ.trieste.it

SOURCE: Current Pharmaceutical Design, (2002) 8/9 (743-761).

Refs: 137

ISSN: 1381-6128 CODEN: CPDEFP

COUNTRY:

Netherlands

DOCUMENT TYPE: FILE SEGMENT:

Journal; General Review 004 Microbiology Pharmacology 030

Drug Literature Index 037

LANGUAGE:

English

SUMMARY LANGUAGE:

English

Gene-encoded, ribosomally synthesised antimicrobial peptides (AMPs) are an ancient and pervasive component of the innate defence mechanisms used by multicellular organisms to control the natural flora and combat pathogens. Bacteria also produce such AMPs to maintain ecological niches free of rival strains. Several hundred different peptides have been characterised to date, and they show a marked degree of variability in both sequence and structure, having evolved to act against distinct microbial targets in different physiological contexts. Many of these peptides appear to function via a selective, but not receptor-mediated, permeabilisation of microbial membranes, while others interact with specific membrane associated or intracellular targets. This review presents a broad survey of different AMP structural classes, emphasising both their molecular diversity and underlying similarities. The mode of action of these peptides and potential for biomedical and other application is also briefly discussed.

L178 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2002 ACS

DUPLICATE 4

ACCESSION NUMBER: 2002:255538 CAPLUS

DOCUMENT NUMBER: TITLE:

136:399369

Mechanisms of iron accumulation in hereditary

hemochromatosis

AUTHOR (S):

SOURCE:

LANGUAGE:

Fleming, Robert E.; Sly, William S.

CORPORATE SOURCE:

Department of Pediatrics, Saint Louis University School of Medicine, St. Louis, MO, 63104, USA Annual Review of Physiology (2002), 64, 663-680

CODEN: ARPHAD; ISSN: 0066-4278

PUBLISHER:

Annual Reviews Inc. Journal; General Review

DOCUMENT TYPE:

English

A review. Hereditary hemochromatosis (HH) is a common inborn error of iron metab. characterized by excess dietary iron absorption and iron deposition in several tissues. Clin. consequences include hepatic failure, hepatocellular carcinoma, diabetes, cardiac failure, impotence, and arthritis. Despite the discovery of the mutation underlying most cases of HH, considerable uncertainty exists in the mechanism by which the normal gene product, HFE, regulates iron homeostasis. Knockout of the HFE gene clearly confers the HH phenotype on mice. However, studies on HFE expressed in cultured cells have not yet clarified the mechanism by which HFE mutations lead to increased dietary iron absorption. Recent discoveries suggest other genes, including a second transferrin receptor and the circulating peptide hepcidin, participate in a shared pathway with HFE in regulation of iron absorption. This review summarizes our current understanding of the relation between iron stores and absorption and presents models to explain the dysregulated iron homeostasis in HH.

REFERENCE COUNT:

THERE ARE 104 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5 ACCESSION NUMBER:

2002:238928 CAPLUS

DOCUMENT NUMBER:

137:44616

104

TITLE:

AUTHOR (S):

Independent and overlapping transcriptional activation during liver development and regeneration in mice Kelley-Loughnane, Nancy; Sabla, Gregg E.; Ley-Ebert,

CORPORATE SOURCE:

Catherine; Aronow, Bruce J.; Bezerra, Jorge A. Divisions of Gastroenterology, Hepatology, and Nutrition, Children's Hospital Research Foundation and Department of Pediatrics, University of Cincinnati,

Cincinnati, OH, USA

SOURCE: Hepatology (Philadelphia, PA, United States) (2002),

35(3), 525-534

CODEN: HPTLD9; ISSN: 0270-9139

PUBLISHER: W. B. Saunders Co.

DOCUMENT TYPE: Journal LANGUAGE: English

Liver development and regeneration share the requirement for simultaneous proliferation and acquisition of highly specialized cellular functions. However, little is known about mols. with regulatory roles in both processes. We hypothesized that transcriptional reprogramming induced by regeneration recapitulates that of developing liver. To address this hypothesis, we detd. global hepatic gene expression at embryonic day 14.5, postnatal day 14, and 6 to 24 h following partial hepatectomy using microarrays contg. 8,635 cDNAs. Anal. of genes overexpressed during these conditions revealed 3 unique expression patterns. The first was predominantly signature gene clusters specific for each growth phase. Major groups were hematopoiesis-related genes in embryonic livers, metabolic genes during postnatal liver development, and growth/inflammation and metabolic genes during regeneration. The second pattern consisted of dual overexpression during regeneration and at least one phase of development. Consistent with potential regulatory roles in liver growth, most of these transcripts control cell-cell contact, membrane trafficking, cell growth, metab., and inflammatory response. third pattern, revealed by surveying their expression across 76 hepatic and extra-hepatic tissues, uncovered a restricted temporospatial pattern of liver overexpression for CD14, orosomucoid 1, hepcidin, Spi 2.1, Ith3, and Tim-44. In conclusion, these results provide a basis for the identification of gene and gene groups that play crit. roles at different phases of liver development and regeneration, and underscore the importance of maintaining metabolic demands during organ growth. REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS

L178 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 6

ACCESSION NUMBER:

2002:418643 CAPLUS TITLE:

Chemical synthesis of .beta.-defensins and LEAP-1/

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

hepcidin Kluver, E.; Schulz, A.; Forssmann, W.-G.; Adermann, K.

AUTHOR (S): CORPORATE SOURCE:

IPF Pharmaceuticals GmbH, Hanover, D-30625, Germany SOURCE: Journal of Peptide Research (2002), 59(6), 241-248 CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Blackwell Munksgaard

DOCUMENT TYPE: Journal LANGUAGE: English

A large and steadily growing subfamily of antimicrobially active peptides of animals and plants is formed by the defensins, which are highly disulfide-bonded, cationic peptides with a mol. mass of about 4 kDa. synthesis of the human .beta.-defensins 1 and 2 (hBD-1, hBD-2) as well as of the novel murine .beta.-defensins 7 and 8 (mBD-7 and mBD-8) is reported. The peptides were synthesized by solid-phase peptide synthesis using fluorenylmethoxycarbonyl chem. The linear products were oxidized in the presence of the cysteine/cystine redox system to the biol. active mols. The correct disulfide connectivity of the resulting cyclic products was partly verified by mass spectrometry and sequence anal. of the fragments obtained after tryptic cleavage. In addn., the recently discovered antimicrobially active human peptide LEAP-1/hepcidin, which contains four disulfide bonds, was successfully synthesized and subsequently oxidized. For Liver-expressed anti microbial peptide (LEAP) -1/hepcidin and hBD-1, the identity of native and synthetic peptides was demonstrated by high-pressure liq. chromatog. and capillary electrophoretic anal. The general synthetic procedure is suitable to rapidly perform the total chem. synthesis of novel fully bioactive defensins, which are expected to be identified soon, as well as

of structurally modified analogs.

REFERENCE COUNT: THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS 32 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 9 OF 33 SCISEARCH COPYRIGHT 2002 ISI (R) DUPLICATE 7

ACCESSION NUMBER: 2002:182021 SCISEARCH

THE GENUINE ARTICLE: 522FP

TITLE: Absence of hepcidin gene mutations in 10 Italian

patients with primary iron overload

AUTHOR: Majore S; Binni F; Ricerca B M; Brioli G; Grammatico P

(Reprint)

CORPORATE SOURCE: Univ Roma La Sapienza, Osp Spallanzani, Via Portuense 292,

I-00149 Rome, Italy (Reprint); Univ Roma La Sapienza, Dep Expt Med & Pathol, I-00149 Rome, Italy; Univ Rome Sacro

Cuore, Serv Hematol, Rome, Italy

COUNTRY OF AUTHOR: Italy

SOURCE:

HAEMATOLOGICA, (FEB 2002) Vol. 87, No. 2, pp. 221-222. Publisher: FERRATA STORTI FOUNDATION, STRADA NUOVA 134,

27100 PAVIA, ITALY.

ISSN: 0390-6078. DOCUMENT TYPE: Letter; Journal

LANGUAGE:

English

REFERENCE COUNT: 10

L178 ANSWER 10 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 8

ACCESSION NUMBER: 2002104070 EMBASE

TITLE:

Haemochromatosis: Understanding the mechanism of disease and implications for diagnosis and patient management following the recent cloning of novel genes involved in iron metabolism.

**AUTHOR:** Fletcher L.M.; Halliday J.W.

CORPORATE SOURCE: Prof. J.W. Halliday, 38 Castile Street, Indooroopilly, QLD

4068, Australia. jhallid@tpgi.com.au

SOURCE: Journal of Internal Medicine, (2002) 251/3 (181-192).

Refs: 62

ISSN: 0954-6820 CODEN: JINMEO

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 005 General Pathology and Pathological Anatomy

006 Internal Medicine 048 Gastroenterology

LANGUAGE: English SUMMARY LANGUAGE: English

Haemochromatosis, a common recessive genetic disorder in people of Northern European descent, is an iron storage disorder characterized by excessive hepatic iron accumulation resulting from disruption of the regulation of intestinal iron absorption. The identification of novel genes involved in the control of iron absorption from the diet has allowed improved understanding of iron metabolism in health and disease. In particular, the identification of the haemochromatosis gene (HFE) and more recently the transferrin receptor 2 gene (TfR2) together with the specific mutations in these genes which result in hepatic iron overload, has enhanced our understanding of the pathophysiology of haemochromatosis. However, because of the wide variation in phenotypic expression of the disease, there now exists a considerable challenge to diagnosis and patient management.

L178 ANSWER 11 OF 33 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 2002:385193 SCISEARCH

THE GENUINE ARTICLE: 536RA

TITLE: HFE is required for hepcidin upregulation in

response to iron loading

AUTHOR: Ahmad K A (Reprint); Migas M C; Waheed A; Britton R S;

Bacon B R; Sly W S; Fleming R E

CORPORATE SOURCE: St Louis Univ, Sch Med, Dept Biochem & Mol Biol, St Louis,

MO 63104 USA; St Louis Univ, Sch Med, Dept Pediat, St

Louis, MO 63104 USA; St Louis Univ, Sch Med, Dept Med, St

Louis, MO 63104 USA

COUNTRY OF AUTHOR:

SOURCE:

PEDIATRIC RESEARCH, (APR 2002) Vol. 51, No. 4, Part 2,

Supp. [S], pp. 137A-137A. MA 798.

Publisher: INT PEDIATRIC RESEARCH FOUNDATION, INC, 351

WEST CAMDEN ST, BALTIMORE, MD 21201-2436 USA.

ISSN: 0031-3998.

MEDLINE

DOCUMENT TYPE:

Conference; Journal

LANGUAGE:

English

USA

REFERENCE COUNT:

Eijg.

L178 ANSWER 12 OF 33

ACCESSION NUMBER:

2001408221 MEDLINE

DOCUMENT NUMBER:

21353036 PubMed ID: 11459944

TITLE:

Hepcidin: a putative iron-regulatory hormone

relevant to hereditary hemochromatosis and the anemia of

chronic disease.

COMMENT:

Comment on: Proc Natl Acad Sci U S A. 2001 Jul

17;98(15):8780-5

AUTHOR:

Fleming R E; Sly W S

CORPORATE SOURCE:

Department of Pediatrics, Saint Louis University School of

Medicine, St. Louis, MO 63014, USA.

SOURCE:

PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (2001 Jul 17) 98 (15) 8160-2.

Ref: 30

Journal code: 7505876. ISSN: 0027-8424.

PUB. COUNTRY:

United States Commentary

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE:

FILE SEGMENT:

English Priority Journals

ENTRY MONTH:

200108

ENTRY DATE:

Entered STN: 20010903

Last Updated on STN: 20010903 Entered Medline: 20010830

L178 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2002 ACS

2001:403041 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

135:29859

TITLE:

Antibiotic peptides from human mouse and rat

INVENTOR(S):

Ito, Yasuaki; Ogi, Kazuhiro; Nishi, Kazunori; Tanaka,

Hideyuki

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 41 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE APPLICATION NO. DATE

JP 2001149083

A2 20010605

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JP 2000-276083 20000912

DUPLICATE 9

PRIORITY APPLN. INFO.:

JP 1999-262228 A 19990916

AB A novel peptide expressed in human liver and activated macrophage with antibiotic and cell function regulatory activities, and its mouse and rat homologs, are disclosed. Antibodies to the peptides as diagnostic agent, method and reagent kits for screening of activators/inhibitors as drugs for infection, septicemia, drug intoxication/poisoning, tuberculosis, cancer, liver function disorder/impairment, immune function disorder/impairment, or endocrine disorder, are claimed. Recombinant expression of human peptide in COS-7 cells and CHO-K1 cells, is described.

L178 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 10

ACCESSION NUMBER:

2001:561175 CAPLUS

DOCUMENT NUMBER:

135:271120

TITLE:

Lack of hepcidin gene expression and severe

tissue iron overload in upstream stimulatory factor 2

(USF2) knockout mice

AUTHOR (S):

Nicolas, Gael; Bennoun, Myriam; Devaux, Isabelle; Beaumont, Carole; Grandchamp, Bernard; Kahn, Axel;

Vaulont, Sophie

CORPORATE SOURCE:

Institut National de la Sante et de la Recherche Medicale 129, Departement Genetique Developpement et Pathologie Moleculaire, Institut Cochin de Genetique Moleculaire, Faculte de Medicine Cochin-Port Royal, Paris, 75014, Fr.

SOURCE:

Proceedings of the National Academy of Sciences of the

United States of America (2001), 98(15), 8780-8785

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: DOCUMENT TYPE: National Academy of Sciences

English

Journal LANGUAGE:

We previously reported the disruption of the murine gene encoding the transcription factor USF2 and its consequences on glucose-dependent gene regulation in the liver. We report here a peculiar phenotype of Usf2-/mice that progressively develop multi-visceral iron overload; plasma iron overcomes transferrin binding capacity, and nontransferrin-bound iron accumulates in various tissues including pancreas and heart. In contrast, the splenic iron content is strikingly lower in knockout animals than in controls. To identify genes that may account for the abnormalities of iron homeostasis in Usf2-/- mice, we used suppressive subtractive hybridization between livers from Usf2-/- and wild-type mice. We isolated a cDNA encoding a peptide, hepcidin (also referred to as LEAP-1, for liver-expressed antimicrobial peptide), that was very recently purified from human blood ultrafiltrate and from urine as a disulfide-bonded peptide exhibiting antimicrobial activity. Accumulation of iron in the liver has been recently reported to up-regulate hepcidin expression, whereas our data clearly show that a complete defect in hepcidin expression is responsible for progressive tissue iron overload. The striking similarity of the alterations in iron metab. between HFE knockout mice, a murine model of hereditary hemochromatosis, and the Usf2-/- hepcidin-deficient mice suggests that hepcidin may function in the same regulatory pathway as HFE. We propose that hepcidin acts as a signaling mol. that is required in conjunction with HFE to regulate both intestinal iron absorption and iron storage in macrophages.

REFERENCE COUNT:

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS 36 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L178 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2002 ACS

DUPLICATE 11

ACCESSION NUMBER:

2001:561076 CAPLUS

DOCUMENT NUMBER:

135:342157

TITLE:

Hepcidin: A putative iron-regulatory hormone

relevant to hereditary hemochromatosis and the anemia

of chronic disease

AUTHOR (S): CORPORATE SOURCE: Fleming, Robert E.; Sly, William S.

Department of Pediatrics, Saint Louis University

SOURCE:

School of Medicine, St. Louis, MO, 63014, USA Proceedings of the National Academy of Sciences of the

United States of America (2001), 98(15), 8160-8162

CODEN: PNASA6; ISSN: 0027-8424 PUBLISHER: National Academy of Sciences

DOCUMENT TYPE:

Journal; General Review

LANGUAGE: English

A review, with refs. The role of hepcidin as putative

iron-regulatory hormone in hereditary hemochromatosis and the anemia of chronic disease is discussed.

REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

# **WEST Search History**

DATE: Monday, July 22, 2002

Set Name Side by side	Hit Count	Set Name result set
DB= $USPT$ , $PGPB$ , $EPAB$ , $DWPI$ , $TDBD$ ; $PLUR$ = $YES$ ; $OP$ = $AD$ ,	r	result set
L2 pollutant? and PAH and expression and exposure	20	L2
L1 pollutant? and PAH and expression	24	L1

END OF SEARCH HISTORY

### WEST

Generate Collection

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## Search Results - Record(s) 1 through 24 of 24 returned.

☐ 1. Document ID: US 20020091247 A1

L1: Entry 1 of 24

File: PGPB

Jul 11, 2002

PGPUB-DOCUMENT-NUMBER: 20020091247

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020091247 A1

TITLE: Polycyclic aromatic hydrocarbon induced molecules

PUBLICATION-DATE: July 11, 2002

INVENTOR-INFORMATION:

NAME CITY

Castro Valley

STATE COUNTRY

RULE-47

Kaser, Matthew R. Azimzai, Yalda

Hayward

CA US

Yue, Henry

Sunnyvale

CA

US

US-CL-CURRENT:  $\underline{536}/\underline{23.2}$ ;  $\underline{435}/\underline{6}$ ,  $\underline{435}/\underline{7.1}$ ,  $\underline{530}/\underline{350}$ 

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMIC Draw Desc Image

☐ 2. Document ID: US 20020028444 A1

L1: Entry 2 of 24

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020028444

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020028444 A1

TITLE: METHOD AND KITS FOR PREPARING MULTICOMPONENT NUCLEIC ACID CONSTRUCTS

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

HARNEY, PETER D.

ALISO VIEJO

CA

US

HARNEY, JENNIFER

ALISO VIEJO

 $C\Delta$ 

US

US-CL-CURRENT: 435/6

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMIC Draw Desc Image

☐ 3. Document ID: US 20020025517 A1

L1: Entry 3 of 24

File: PGPB

Feb 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020025517

Record List Display

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020025517 A1

TITLE: METHODS AND COMPOSITIONS FOR CELLULAR AND METABOLIC ENGINEERING

PUBLICATION-DATE: February 28, 2002

INVENTOR - INFORMATION:

NAME

CITY

STATE COUNTRY

RULE-47

MINSHULL, JEREMY

SAN FRANCISCO

CA

US

STEMMER, WILLEM P. C.

LOS GATOS

CA

US

US-CL-CURRENT: 435/6; 435/91.2

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMMC Draw Desc Image

☐ 4. Document ID: US 20010029049 A1

L1: Entry 4 of 24

File: PGPB

Oct 11, 2001

PGPUB-DOCUMENT-NUMBER: 20010029049

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010029049 A1

TITLE: "SELF - ENCODING SENSOR WITH MICROSPHERES "

PUBLICATION-DATE: October 11, 2001

INVENTOR-INFORMATION:

DICKINSON, TODD A.

NAME

CITY

STATE

COUNTRY

RULE-47

WALT, DAVID R.

LEXINGTON
SAN DIEGO

MA CA US US

US-CL-CURRENT: 436/518

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KNNC Draw. Desc Image

☐ 5. Document ID: US 20010023847 A1

L1: Entry 5 of 24

File: PGPB

Sep 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010023847

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010023847 A1

TITLE: Method and apparatus for anaerobically degrading pollutants with alkanes

PUBLICATION-DATE: September 27, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Perriello, Felix Anthony

Norwood

MA

US

US-CL-CURRENT: 210/611; 210/620, 210/908, 210/909

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWAC | Draw Desc | Image |

☐ 6. Document ID: US 6409821 B1

L1: Entry 6 of 24

File: USPT

US-PAT-NO: 6409821

DOCUMENT-IDENTIFIER: US 6409821 B1

TITLE: Hydraulic binder and cement compositions containing photocatalyst particles

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Cassar; Luigi Pepe; Carmine Milan Bergamo

IT IT

US-CL-CURRENT: 106/733; 106/819

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draw Desc Image

☐ 7. Document ID: US 6391640 B1

L1: Entry 7 of 24

File: USPT

US-PAT-NO: 6391640

DOCUMENT-IDENTIFIER: US 6391640 B1

TITLE: Methods and compositions for cellular and metabolic engineering

DATE-ISSUED: May 21, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Minshull; Jeremy

San Francisco

CA

Stemmer; Willem P. C.

Los Gatos

CA

US-CL-CURRENT: 435/440; 435/6, 435/91.2, 536/23.1, 536/24.3

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWIC Draw Desc Image

☐ 8. Document ID: US 6327410 B1

L1: Entry 8 of 24

File: USPT

US-PAT-NO: 6327410

DOCUMENT-IDENTIFIER: US 6327410 B1

TITLE: Target analyte sensors utilizing Microspheres

DATE-ISSUED: December 4, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Walt; David R.

Lexington

MA

Michael; Karri L.

Somerville

MA

US-CL-CURRENT: 385/115; 359/900, 385/12, 385/147, 385/38, 435/808

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWAC | Draw Desc | Image |

☐ 9. Document ID: US 6309883 B1

L1: Entry 9 of 24

File: USPT

ZIP CODE

US-PAT-NO: 6309883

DOCUMENT-IDENTIFIER: US 6309883 B1

TITLE: Methods and compositions for cellular and metabolic engineering

DATE-ISSUED: October 30, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Minshull; Jeremy

San Francisco

CA

Stemmer; Willem P. C.

Los Gatos

CA

US-CL-CURRENT: 435/440; 435/6, 536/23.1, 536/24.3

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draw Desc Image

☐ 10. Document ID: US 6266459 B1

L1: Entry 10 of 24

File: USPT

ZIP CODE

US-PAT-NO: 6266459

DOCUMENT-IDENTIFIER: US 6266459 B1

TITLE: Fiber optic sensor with encoded microspheres

DATE-ISSUED: July 24, 2001

INVENTOR - INFORMATION:

NAME

CITY

STATE

COUNTRY

Walt; David R.

Lexington

MA

Michael; Karri Lynn

Somerville

MΑ

US-CL-CURRENT: 385/12; 345/808, 359/900, 385/147, 385/38, 435/808

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draw Desc Image

☐ 11. Document ID: US 6262247 B1

L1: Entry 11 of 24

File: USPT

US-PAT-NO: 6262247

DOCUMENT-IDENTIFIER: US 6262247 B1

TITLE: Polycyclic aromatic hydrocarbon induced molecules

DATE-ISSUED: July 17, 2001

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Kaser; Matthew R. Castro Valley CA Azimzai; Yalda Hayward CA Yue; Henry Sunnyvale CA

US-CL-CURRENT:  $\underline{536}/\underline{23.5}$ ;  $\underline{435}/\underline{6}$ ,  $\underline{536}/\underline{23.1}$ ,  $\underline{536}/\underline{24.31}$ 

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMMC Draw Desc Image

☐ 12. Document ID: US 6136576 A

L1: Entry 12 of 24

File: USPT

KOMC Draw Desc Image

US-PAT-NO: 6136576

DOCUMENT-IDENTIFIER: US 6136576 A

TITLE: Method for the recombinant production of 1,3-propanediol

DATE-ISSUED: October 24, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Diaz-Torres; Maria San Mateo CA
Dunn-Coleman; Nigel S Los Gatos CA
Chase; Matthew W. Belmont CA
Trimbur; Donald Redwood City CA

Full Title Citation Front Review Classification Date Reference Sequences Attachments

US-CL-CURRENT: 435/158; 435/232, 530/350, 536/23.1, 536/23.2, 536/23.7

☐ 13. Document ID: US 6117643 A

L1: Entry 13 of 24 File: USPT

US-PAT-NO: 6117643

DOCUMENT-IDENTIFIER: US 6117643 A

TITLE: Bioluminescent bioreporter integrated circuit

DATE-ISSUED: September 12, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Simpson; Michael L. Knoxville TN Sayler; Gary S. Blaine TN Paulus; Michael J. Knoxville TN

US-CL-CURRENT:  $\underline{435/7.1}$ ;  $\underline{422/55}$ ,  $\underline{422/57}$ ,  $\underline{422/58}$ ,  $\underline{422/82.01}$ ,  $\underline{422/82.05}$ ,  $\underline{422/82.06}$ ,

 $\frac{422/82.07}{436/518}, \frac{422/82.08}{436/524}, \frac{435/287.1}{436/531}, \frac{435/287.2}{436/805}, \frac{435/288.7}{435/6}, \frac{435/7.32}{435/808}, \frac{435/808}{436/805}$ 

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWIC Draw Desc Image

☐ 14. Document ID: US 6015498 A

L1: Entry 14 of 24

File: USPT

US-PAT-NO: 6015498

DOCUMENT-IDENTIFIER: US 6015498 A

TITLE: Coal ashes used for treating various media and facilities for using same

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Gleizes; Raymond M.

95680 Montlignon

FR

US-CL-CURRENT: 210/688; 134/7, 210/143, 210/194, 210/241, 210/251, 210/691, 425/62

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KNNC Draw Desc Image

☐ 15. Document ID: US 5854010 A

L1: Entry 15 of 24

File: USPT

US-PAT-NO: 5854010

DOCUMENT-IDENTIFIER: US 5854010 A

TITLE: Bioassay for detecting 2,3,7,8-tetrachlorodibenzo-para-dioxin and TCDD-like compounds and novel recombinant cell line useful therefor

DATE-ISSUED: December 29, 1998

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Denison; Michael S.

Dixon

CA 95620

Brouwer; Abraham

6703 GX Wageningen

NL

Clark; George C.

Durham

NC

27703

US-CL-CURRENT: 435/8; 435/354, 549/359

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KAMC Draw, Desc Image

☐ 16. Document ID: US 5849906 A

L1: Entry 16 of 24

File: USPT

US-PAT-NO: 5849906

DOCUMENT-IDENTIFIER: US 5849906 A

TITLE: Antigenic conjugates of polycyclic aromatic hydrocarbons to nucleosides

DATE-ISSUED: December 15, 1998

INVENTOR-INFORMATION:

NAME

CITY

Omaha

STATE ZIP CODE

COUNTRY

Cavalieri; Ercole Rogan; Eleanor Waterloo

NE 6

68069 68144

US-CL-CURRENT: 536/55.3; 536/22.1

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMIC Draw Desc Image

☐ 17. Document ID: US 5837458 A

L1: Entry 17 of 24

File: USPT

ZIP CODE

US-PAT-NO: 5837458

DOCUMENT-IDENTIFIER: US 5837458 A

TITLE: Methods and compositions for cellular and metabolic engineering

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Minshull; Jeremy

San Francisco

CA

Stemmer; Willem P. C.

Los Gatos

CA

US-CL-CURRENT: 435/6

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWAC Draw Desc Image

☐ 18. Document ID: US 5807690 A

L1: Entry 18 of 24

File: USPT

US-PAT-NO: 5807690

DOCUMENT-IDENTIFIER: US 5807690 A

TITLE: Method of screening physiological samples for elevated levels of heat shock

proteins

DATE-ISSUED: September 15, 1998

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Sanders; Brenda M.

Long Beach

CA

COON

Jenkins; Kenneth D.

Long Beach

each CA

Nichols; Jack L.

Vancouver

CA

Imber; Bryan E.

Victoria

CA

US-CL-CURRENT:  $\frac{435}{7.21}$ ;  $\frac{435}{29}$ ,  $\frac{435}{7.1}$ ,  $\frac{435}{7.2}$ ,  $\frac{435}{7.22}$ ,  $\frac{435}{7.31}$ ,  $\frac{435}{7.32}$ ,  $\frac{435}{501}$ ,  $\frac{436}{503}$ ,  $\frac{436}{8}$ 

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draws Desc Image

☐ 19. Document ID: US 5780246 A

L1: Entry 19 of 24

File: USPT

US-PAT-NO: 5780246

DOCUMENT-IDENTIFIER: US 5780246 A

TITLE: Accumulation of heat shock proteins for evaluating biological damage due to

chronic exposure of an organism to sublethal levels of stressors

DATE-ISSUED: July 14, 1998

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Sanders; Brenda M. Long Beach CA Jenkins; Kenneth D. Long Beach CA

Nichols; Jack L. West Vancouver CA Imber; Bryan E. Victoria CA

US-CL-CURRENT:  $\underline{435}/\underline{7.21}$ ;  $\underline{435}/\underline{29}$ ,  $\underline{435}/\underline{7.1}$ ,  $\underline{435}/\underline{7.2}$ ,  $\underline{435}/\underline{7.22}$ ,  $\underline{435}/\underline{7.31}$ ,  $\underline{435}/\underline{7.32}$ , <u>436/15</u>, <u>436/501</u>, <u>436/8</u>

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMMC Draw Desc Image

☐ 20. Document ID: US 5731163 A

L1: Entry 20 of 24

File: USPT

US-PAT-NO: 5731163

DOCUMENT-IDENTIFIER: US 5731163 A

TITLE: Lyophilized bioluminescent bacterial reagent for the detection of toxicants

DATE-ISSUED: March 24, 1998

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Vandyk; Tina Kangas Wilmington DΕ Wagner; Lorraine Winona Newark DE

US-CL-CURRENT: 435/7.32; 435/252.3, 435/6, 435/8

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWC Draw Desc Image

☐ 21. Document ID: US 5683868 A

L1: Entry 21 of 24

File: USPT

US-PAT-NO: 5683868

DOCUMENT-IDENTIFIER: US 5683868 A

TITLE: Highly sensitive method for detecting environmental insults

DATE-ISSUED: November 4, 1997

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

LaRossa; Robert Alan West Chester PA
Majarian; William Robert Mount Royal NJ
Van Dyk; Tina Kangas Wilmington DE

US-CL-CURRENT: 435/6; 435/252.33, 435/29, 435/8, 536/23.2, 536/23.7, 536/24.1

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMIC Draw Desc Image

22. Document ID: US 5567324 A

L1: Entry 22 of 24 File: USPT

US-PAT-NO: 5567324

DOCUMENT-IDENTIFIER: US 5567324 A

TITLE: Method of biodegrading hydrophobic organic compounds

DATE-ISSUED: October 22, 1996

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Rothmel; Randi K. Mt. Holly NJ Unterman; Ronald Lawrenceville NJ

US-CL-CURRENT: 210/611; 134/19, 134/26, 134/42, 210/612, 210/909, 435/262.5,

435/821, 588/209

Full Title Citation Front Review Classification Date Reference Sequences Attachments KNIC Draw Desc Image

☐ 23. Document ID: US 5464750 A

L1: Entry 23 of 24 File: USPT

US-PAT-NO: 5464750

DOCUMENT-IDENTIFIER: US 5464750 A

TITLE: Accumulation of heat shock proteins for evaluating biological damage due to

chronic exposure of an organism to sublethal levels of pollutants

DATE-ISSUED: November 7, 1995

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Sanders; Brenda M. Long Beach CA Jenkins; Kenneth D. Long Beach CA

Nichols; Jack L. Vancouver CA
Imber; Bryan E. Victoria CA

US-CL-CURRENT: 435/7.21; 435/29, 435/7.1, 435/7.2, 435/7.22, 435/7.31, 435/7.32,

436/501

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMAC Draw Desc Image

☐ 24. Document ID: US 5232833 A

L1: Entry 24 of 24

File: USPT

US-PAT-NO: 5232833

DOCUMENT-IDENTIFIER: US 5232833 A

TITLE: Accumulation of heat shock proteins for evaluating biological damage due to

chronic exposure of an organism to sublethal levels of pollutants

DATE-ISSUED: August 3, 1993

INVENTOR - INFORMATION:

NAME

Sanders; Brenda M.

Jenkins; Kenneth D.

Nichols; Jack L. Imber; Bryan E. CITY Long Beach

STATE ZIP CODE

COUNTRY

CA

Long Beach CA

Vancouver Victoria CA CA

US-CL-CURRENT:  $\underline{435}/\underline{7.21}$ ;  $\underline{435}/\underline{29}$ ,  $\underline{435}/\underline{7.2}$ ,  $\underline{435}/\underline{7.22}$ ,  $\underline{435}/\underline{7.31}$ ,  $\underline{435}/\underline{7.32}$ 

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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